Amendments

In accordance with 37 CFR §1.121, please amend the above-identified application as set forth below.

Amendments to the Claims:

Please amend the claims as set forth below.

1. (Previously Presented) An electromechanical functional module comprising:

at least one transducer having a first electrode and a second electrode and having a top and a bottom;

at least one upper fiber cover layer, which is nonconducting and is positioned over the at least one transducer;

at least one lower fiber cover layer, which is nonconducting and is positioned below the at least one transducer;

at least one fiber interlayer, which is nonconducting with at least one cut-out for accommodating the at least one transducer;

at least one upper electric contact strip that is integrally laminated onto the at least one upper fiber cover layer by use of an epoxy resin having thermoplastic properties and in contact with the first electrode of the at least one transducer, the upper electric contact strip substantially covering said top of said at least one transducer; and

at least one lower electric contact strip that is integrally laminated onto the at least one lower fiber cover layer by use of an epoxy resin having thermoplastic properties and in contact with the second electrode of the at least one transducer, the lower electric contact strip substantially covering said bottom of said at least one transducer;

wherein the at least one upper fiber cover layer, the at least one lower fiber cover layer, the at least one transducer and the at least one fiber interlayer are in a unitary resin body;

wherein the at least one upper electric contact strip includes woven elastic and the at least one lower electric contact strip includes woven elastic.

2. (Cancelled)

3. (Cancelled)

4. (Previously Amended) The electromechanical functional module according to claim 1, wherein the at least one upper electric contact strip and the at least one lower electric contact strip includes carbon fibers.

5. (Cancelled)

6. (Previously Presented) The electromechanical functional module according to claim 1, wherein the at least one upper electric contact strip and the at least one lower electric contact strip includes metal wires.

7. (Cancelled)

8. (Original) The electromechanical functional module according to claim 1, wherein the at least one upper fiber cover layer, the at least one lower fiber cover layer and the at least one fiber interlayer are laminated together to form a fiber composite.

9. (Original) The electromechanical functional module according to claim 8, wherein the laminated fiber composite includes a resin.

10. (Original) The electromechanical functional module according to claim 1, wherein the at least one transducer includes a piezoceramic.

11. (Original) The electromechanical functional module according to claim 1, wherein the at least one transducer includes an electrostrictive.

12. (Original) The electromechanical functional module according to claim 1, wherein the at least one upper fiber cover layer, the at least one lower fiber cover layer and the at least one fiber interlayer includes polyester felt.

13. – 20. (Cancelled)

21. (Previously Presented) An electromechanical functional module comprising:

an nonconductive fiber interlayer having a cut-out therethrough;

a transducer located within the cut-out and positioned thereby;

upper and lower fiber cover layers respectively lying over and below the transducer and interlayer;

an upper electric contact strip of woven elastic laminated to the upper fiber cover layer, the upper electric contact strip in contact with and substantially overlying the transducer;

a lower electric contact strip of woven elastic laminated to the lower fiber cover layer, the lower electric contact strip in contact with and substantially underlying the transducer; and

a resin injected into the combination of the transducer, the upper and lower fiber cover layers, and the fiber interlayer;

thereby forming the electromechanical functional module.

22. (Previously Presented) An electromechanical functional module as set forth in claim 21, including a resin for laminating the upper and lower electric contact strips to their respective upper and lower fiber cover layers.

23. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the upper and lower electric contact strips include carbon fibers.

24. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the upper and lower electric contact strips include metal wires.

25. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the resin includes an epoxide resin with thermoplastic qualities.

26. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the resin is a resin matrix.

27. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the resin injected into the combination of the transducer, the upper and lower fiber cover layers, and the fiber interlayer is injected by applying a vacuum.

28. (Previously Presented) An electromechanical functional module as set forth in claim 21, wherein the transducer is a piezoelectric element.

29. (Previously Presented) An electromechanical functional module as set forth in claim 27, wherein the upper and lower fiber cover layers, and the fiber interlayer serve to encapsulate the piezoelectric element.

30. (Previously Presented) An electromechanical functional module as set forth in claim 29, wherein the piezoelectric element is shaped to form a curved piezofilm.

31. (Previously Presented) An electromechanical functional module of claim 21 wherein said upper electric contact strip completely covers the transducer.

32. (Previously Presented) The electromechanical functional module of claim 21 wherein said lower electric contact strip completely underlies the transducer.

33. (Previously Presented) The electromechanical functional module of claim 21 wherein said upper electric contact strip overlies said transducer and extends to three out of four edges of said transducer.

34. (Previously Presented) The electromechanical functional module of claim 21 wherein said lower electric contact strip underlies said transducer and extends to three of four sides of said transducer.